Appl. No. 09/689,854 Amdt. Dated 05/14/2004

Reply to Office Action of 01/14/2004

REMARKS

This Amendment and Response is being submitted in response to the

Office Action dated January 14, 2004, for which a response is due May 14, 2004

with a one month extension of time. In the Office Action, the examiner objected

to Figures 1-3 and 8 and to the Abstract. In addition, claims 1-13 were rejected

under 35 U.S.C. §112, first paragraph or second paragraph. Claims 1-6 were

also rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No.

5,715,276 issued to Tran et al. ("Tran") and 35 U.S. Patent No. 5,903,595 issued

to Suzuki ("Suzuki"). Claims 7-13 were rejected as being unpatentable over Tran

in view of the admitted prior art. Claims 1-2, 4-5, 7-8 and 10-13 are being

amended, with claims 1-13 pending. Reexamination and reconsideration in light

of the amendments and remarks made herein are respectfully requested.

I. Drawings

Replacement sheets for Figures 1-3 and 8 are being submitted herewith to

correct the deficiencies noted in the Office Action.

II. Specification

The Abstract has been amended to correct the deficiencies noted in the

Office Action. In addition, the Specification has been amended to be in accord

with the drawings changes being submitted herewith.

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III. 35 U.S.C. 112, first and second paragraphs

The claims have been amended to overcome the Section 112 rejections

made in the Office Action. In particular, the claims have been amended to

clarify that the first storage means stores "N input signals."

The examiner also requested that the applicant point out which part of the

disclosure supports the claimed "comparator is an XOR circuit," as recited in

claims 6 and 9. Applicant submits that one skilled in the art would read the

specification and the claims (which form part of the disclosure and may be relied

on as such) and recognize than an XOR circuit is capable of carrying out the

operations of the recited "comparator."

Finally, claims 10-11 were rejected under Section 12 for use of the term

"counter." In response claims 10-11 have been amended to recite an "arithmetic

unit for squaring both components of the complex correlation sample and

summing up said squared components." Support can be found, in part, on page

8, lines 9-27.

IV. Tran

Applicant submits that Tran fails to teach or disclose the arrangement of

claims 1-6. Tran discloses a bit matched filter which purports to require less

silicon and consume less power. However, as with conventional matched filters,

the matched filter of Tran is matched to one reference signal at a time. In

contrast, one aspect of the applicant's disclosure "allows several spreading codes

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to be searched for in parallel by time-multiplexing the reference signals used."

(See Application, p. 11, lines 14-15). In one embodiment, this is achieved using

the selection signal 6-25, which can be a memory address. This eliminates the

need to use more than one filter to simultaneously search for more than one

signal to be received. Thus, Tran fails to teach or disclose the "second means for

storing K M-sample long reference signals, where K≥2", as recited in amended

Claims 1 and 7.

Applicant further submits that Tran, taken alone or in combination with

the admitted prior art, fails to teach or disclose the arrangement of claims 7-13.

In particular, neither Tran nor the admitted prior art teach or suggest matching

more than one reference signal at a time, as recited in the present claims.

V. Suzuki

Applicant submits that Suzuki fails to teach or disclose the arrangement

of claims 1-6. Suzuki discloses a digital matched filter which purports to have

low power consumption. As with conventional matched filters and the matched

filter of Tran discussed above, Suzuki matches to one reference signal at a time.

In contrast, one aspect of the applicant's disclosure "allows several spreading

codes to be searched for in parallel by time-multiplexing the reference signals

used." (See Application, p. 11, lines 14-15). In one embodiment, this is achieved

using the selection signal 6-25, which can be a memory address. This eliminates

the need to use more than one filter to simultaneously search for more than one

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signal to be received. Thus, Tran fails to teach or disclose the "second means for

storing K M-sample long reference signals, where K≥2", as recited in amended

Claims 1 and 7.

Applicant respectfully submits that the application is now in condition for

allowance. Applicant further submits that the dependent claims are allowable

by virtue of depending on allowable base claims. If there are any questions

regarding this Response or the application in general, a telephone call to the

undersigned would be appreciated since this should expedite the prosecution of

the application for all concerned.

Respectfully submitted,

CROWELL & MORING LLP

Dated: May 14, 2004

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Angela Williams

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